

Abstract

The progress of organic photovoltaics is very impressive. It is time to transfer the technique from small size devices to big module production. In this report, I will present our work on simplifying the fabrication of several kinds of printed polymer solar cells via self-assembly with doctor-blading and spraying as well as slot-die techniques. Moreover, light management is studied in semitransparent polymer solar panels using semitransparent 1DPC or plasma-treated ultrathin metal electrode. In the end, some work about solution-processed CdTe solar cells and deep-blue OLEDs will also be presented.